WHAT IS CLAIMED IS:

1   1. A method for controlling and managing a digital asset transmitted from a sending

2   computer to a receiving computer, the method comprising:

3   establishing a first secure communication pathway between the sending computer and an

4   intermediate server;

5   transmitting the digital asset from the sending computer to the intermediate server using

6   the first secure communication pathway;

7   establishing a second secure communication pathway between the receiving computer and

8   the intermediate server;

9   transmitting the digital asset from the intermediate server to the receiving computer using

10   the second secure communication pathway;

11   transmitting to the receiving computer rights defining how the digital asset may be

12   manipulated; and

13   storing the digital asset at the receiving computer in a way that permits manipulation of the

14   digital asset only in ways that are consistent with the transmitted rights.

1   2. The method of claim 1 wherein storing the digital asset at the receiving computer in a

2   way that permits manipulation of the digital asset only in ways that are consistent with the

3   transmitted rights comprises storing the digital asset in a way that only permits the digital asset to

4   be manipulated using an associated viewer.

1   3. The method of claim 1 wherein the rights defining how the digital asset may be

2   manipulated are defined in a rights document that is transmitted to the receiving computer.

1   4. The method of claim 3 wherein the rights document comprises an XML document.

1   5. The method of claim 3 wherein the rights document includes information identifying a

2   viewer to be used in accessing the digital asset.

1   6. The method of claim 3 wherein the rights document includes information about a party

2   who originated the digital asset.

1   7. The method of claim 3 wherein the rights document includes information about the

2   authority of the sending computer to transmit the digital asset.

1   8. The method of claim 3 wherein the rights document includes information about how to

2   purchase rights to use the digital asset.

1   9. The method of claim 3 wherein the rights document includes information about how to

2   purchase the digital asset.

1   10. The method of claim 3 wherein the rights document includes information about who is

2   authorized to modify the rights defined in the rights document.

1   11. The method of claim 10 wherein the rights document includes a description of aspects

2   of use of the digital asset to be tracked, the method further comprising tracking the aspects of use

3   of the digital asset described in the rights document.

1   12. The method of claim 3 wherein the rights document is transferred to the receiving

2   computer using the second secure communication pathway.

1   13. The method of claim 1 further comprising loading the rights into a secure database at

2   the receiving computer.

1   14. The method of claim 13 wherein:

2   storing the digital asset at the receiving computer in a way that permits only controlled

3 access to the digital asset comprises storing the digital asset in a way that only permits the digital

4 asset to be manipulated using an associated viewer; and

5   the associated viewer interacts with the secure database when accessing the digital asset to

6 ensure that the digital asset is manipulated consistently with the rights granted for manipulating

7 the digital asset.

1   15. The method of claim 1 wherein the rights transmitted to the receiving computer

2 control the ability of a user of the receiving computer to copy, view, print, execute, and modify the

3 digital asset.

1   16. The method of claim 1 further comprising modifying the rights defining how the

2 digital asset may be manipulated.

1   17. The method of claim 16 wherein modifying the rights defining how the digital asset

2 may be manipulated comprises transmitting to the receiving computer a replacement set of rights

3 defining how the digital asset may be manipulated.

1   18. The method of claim 16 wherein modifying the rights defining how the digital asset

2 may be manipulated comprises transmitting to the receiving computer only changes to the rights

3 defining how the digital asset may be manipulated.

1   19. The method of claim 16 further comprising transmitting to the sending computer a

2 notification that the rights have been modified.

1   20. The method of claim 16 wherein:

2   storing the digital asset at the receiving computer in a way that permits manipulation of the

3   digital asset only in ways that are consistent with the transmitted rights comprises storing the

4   digital asset in a way that only permits the digital asset to be manipulated using an associated

5   viewer,

6   the transmitted rights include information identifying a viewer to be used in manipulating

7   the digital asset, and

8   modifying the rights defining how the digital asset may be manipulated comprises

9   modifying the information identifying the viewer to be used in manipulating the digital asset to

10   change the viewer to be used in manipulating the digital asset.

1   21. The method of claim 16 further comprising implementing an asset recall function by

2   modifying the rights defining how the digital asset may be manipulated to prevent a user of the

3   receiving computer from manipulating the digital asset in any way.

1   22. The method of claim 21 wherein implementing the asset recall function further

2   comprises deleting the digital asset from the receiving computer.

1   23. The method of claim 1 further comprising maintaining a digital asset database at the

2   intermediate server, the digital asset database including information identifying the digital asset

3   and the rights transmitted to the receiving computer.

1   24. The method of claim 23 further comprising:

2   providing feedback from the receiving computer to the intermediate server about use of the

3   digital asset; and

4   updating the digital asset database in response to the feedback.

1   25. The method of claim 24 wherein the rights defining how the digital asset may be

2   manipulated indicate how feedback to the intermediate server is to be provided.

1   26. The method of claim 25 wherein the rights permit manipulation of the digital asset

2   only when there is a live connection with the intermediate server.

1   27. The method of claim 25 wherein the rights permit manipulation of the digital asset

2   only when the time since the last connection with the intermediate server is less than a

3   predetermined value.

1   28. The method of claim 24 further comprising permitting the sending computer to access

2   information in the digital asset database about the receiving computer's use of the digital asset.

1   29. The method of claim 28 wherein the sending computer uses the information in the

2   digital asset database about the receiving computer's use of the digital asset in determining when

3   to offer a modification of the digital asset.

1   30. The method of claim 28 wherein the sending computer uses the information in the

2   digital asset database about the receiving computer's use of the digital asset in collecting

3   demographic information about use and pricing of the digital asset.

1   31. The method of claim 24 wherein the receiving computer initiates feedback to the

2   intermediate server in response to a particular manipulation of the digital asset.

1   32. The method of claim 31 wherein the particular manipulation that initiates feedback is

2   identified by the rights defining how the digital asset may be manipulated.

1   33. The method of claim 24 wherein providing feedback from the receiving computer to

2   the intermediate server about use of the digital asset comprises tracking consumption of the digital

3   rights.

1   34. The method of claim 24 wherein providing feedback from the receiving computer to

2   the intermediate server about use of the digital asset comprises tracking individual manipulations

3   of the digital asset.

1   35. The method of claim 24 wherein providing feedback from the receiving computer to

2   the intermediate server about use of the digital asset comprises tracking characteristics of

3   individual portions of the digital asset.

1   36. The method of claim 1 wherein storing the digital asset at the receiving computer in a

2   way that permits manipulation of the digital asset only in ways that are consistent with the

3   transmitted rights comprises storing the digital asset in an encrypted format.

1   37. The method of claim 36 further comprising manipulating the digital asset, the

2   manipulating comprising decrypting the digital asset.

1   38. The method of claim 37 wherein decrypting the digital asset comprises retrieving a

2   key from the intermediate server and using the key in decrypting the digital asset.

1   39. The method of claim 37 wherein decrypting the digital asset comprises retrieving a

2   key from the receiving computer and using the key in decrypting the digital asset.

1   40. The method of claim 1 wherein transmitting rights to the receiving computer

2   comprises transmitting the rights before transmitting the digital asset.

1   41. The method of claim 1 wherein transmitting rights to the receiving computer

2   comprises transmitting the rights after transmitting the digital asset.

1   42. The method of claim 1 wherein establishing the first secure communication pathway

2   between the sending computer and the intermediate server comprises using public key encryption

3   to generate a session key that then is used to encrypt communications between the sending

4   computer and the intermediate server.

1   43. The method of claim 1 wherein establishing the second secure communication

2   pathway between the receiving computer and the intermediate server comprises using public key

3   encryption to generate a second session key that then is used to encrypt communications between

4   the receiving computer and the intermediate server.

1   44. The method of claim 1 wherein:

2   establishing the first secure communication pathway comprises using an encryption

3   technique appropriate for a physical location of the sending computer; and

4   establishing the second secure communication pathway comprises using an encryption

5   technique appropriate for a physical location of the receiving computer.

1   45. A method for controlling and managing a digital asset installed on a computer, the

2   method comprising:

3   installing on the computer rights defining how the digital asset may be manipulated, the

4   installing comprising loading the rights into a secure database at the computer; and

5   storing the digital asset in a way that permits manipulation of the digital asset only in ways

6   that are consistent with the installed rights.

1   46. The method of claim 45 wherein storing the digital asset in a way that permits only

2   controlled access to the digital asset comprises storing the digital asset in a way that only permits

3   the digital asset to be manipulated using an associated viewer.

1   47. The method of claim 45 wherein:

2   storing the digital asset at the receiving computer in a way that permits only controlled

3 access to the digital asset comprises storing the digital asset in a way that only permits the digital

4 asset to be manipulated using an associated viewer; and

5   the associated viewer interacts with the secure database when accessing the digital asset to

6 ensure that the digital asset is manipulated consistently with the rights granted for manipulating

7 the digital asset.

1   48. The method of claim 45 further comprising modifying the rights defining how the

2 digital asset may be manipulated.

1   49. The method of claim 48 wherein modifying the rights defining how the digital asset

2 may be manipulated comprises transmitting to the computer a replacement set of rights defining

3 how the digital asset may be manipulated.

1   50. The method of claim 48 wherein modifying the rights defining how the digital asset

2 may be manipulated comprises transmitting to the computer only changes to the rights defining

3 how the digital asset may be manipulated.

1   51. The method of claim 48 further comprising maintaining a digital asset database at a

2 remote server, the digital asset database including information identifying the digital asset and the

3 rights installed at the computer.

1   52. The method of claim 51 further comprising:

2   providing feedback from the computer to the remote server about use of the digital asset;

3 and

4   updating the digital asset database in response to the feedback.

1   53. The method of claim 52 wherein the rights defining how the digital asset may be

2   manipulated indicate how feedback to the remote server is to be provided.

1   54. The method of claim 53 wherein the rights permit manipulation of the digital asset

2   only when there is a live connection with the remote server.

1   55. The method of claim 53 wherein the rights permit manipulation of the digital asset

2   only when the time since the last connection with the remote server is less than a predetermined

3   value.

1   56. The method of claim 51 wherein the receiving computer initiates feedback to the

2   remote server in response to a particular manipulation of the digital asset.

1   57. The method of claim 56 wherein the particular manipulation that initiates feedback is

2   identified by the rights defining how the digital asset may be manipulated.

1   58. The method of claim 51 wherein providing feedback from the computer to the remote

2   server about use of the digital asset comprises tracking consumption of the digital rights.

1   59. The method of claim 51 wherein providing feedback from the computer to the remote

2   server about use of the digital asset comprises tracking individual manipulations of the digital

3   asset.

1   60. A method for controlling and managing a digital asset transmitted from a sender to

2   multiple recipients, the method comprising:

3   transmitting the digital asset from the sender to the recipients;

4   transmitting to the recipients rights defining how the digital asset may be manipulated;

5   storing the digital asset in storage locations associated with the recipients in a way that

6 permits manipulation of the digital asset only in ways that are consistent with the transmitted

7 rights; and

8   permitting certain ones of the recipients to modify the rights defining how the certain ones

9 of the recipients may manipulate the digital asset.

1   61. The method of claim 60 wherein the transmitted rights permit each recipient to

2 manipulate the digital asset in the same way.

1   62. The method of claim 60 wherein the transmitted rights indicate which recipients may

2 modify the rights.

1   63. The method of claim 62 wherein the transmitted rights indicate one or more classes of

2 recipients that may modify the rights.

1   64. The method of claim 60 further comprising permitting the certain ones of the

2 recipients to transmit the digital asset to other recipients and to control the rights transmitted to the

3 other recipients.

1   65. A method for controlling and managing a digital asset transmitted from a sender to a

2 recipient, the method comprising:

3   transmitting the digital asset from the sender to the recipient;

4   transmitting to the recipient a first set of rights defining how the digital asset may be

5 manipulated;

6   storing the digital asset in a storage location associated with the recipient in a way that

7 permits manipulation of the digital asset only in ways that are consistent with the transmitted

8 rights; and

9   permitting the recipient to transmit the digital asset to another recipient along with a

10   second set of rights defining how the digital asset may be manipulated by the other recipient.

1   66. The method of claim 65 wherein the second set of rights is more restrictive than the

2   first set of rights.

1   67. A system for dynamically managing digital rights of digital content, comprising:

2   a digital content package comprising digital content data and a digital rights manager

3   wherein the digital content data includes encrypted data; and

4   a digital rights database operable to store digital rights relating to the digital content data,

5   wherein the digital rights manager includes code that is operable to:

6   determine whether digital rights to manipulate the digital content data exist in the

7   digital rights database; and

8   decrypt the encrypted data of the digital content data to generate decrypted digital

9   content that can be manipulated.

1   68. The system of claim 67 further comprising:

2   a computer device operable to manipulate the decrypted digital content; and

3   a global rights unit operable to manage the digital rights database and communicate with

4   the computer device wherein the global rights unit is located remote from the computer device.

1   69. The system of claim 68 wherein the global rights unit includes a global clock wherein

2   the computer device includes a local clock, and wherein the global rights unit is operable to

3   synchronize the local clock with the global clock when a communication link between the

4   computer device and the global rights unit is available.

1   70. The system of claim 67 wherein the digital rights manager is operable to decrypt the

2   encrypted data of the digital content only if the digital rights to manipulate the digital content data

3   exist in the digital rights database.

1   71. The system of claim 67 further comprising a computer device wherein the decrypted

2   digital content includes an executable file that is operable to run on the computer device.

1   72. The system of claim 67 wherein the digital content package further comprises a viewer

2   module including viewer code operable to facilitate manipulation of the decrypted content.

1   73. The system of claim 72 further comprising a computer device wherein the viewer code

2   is operable to allow an end-user to manipulate the decrypted digital content on the computer

3   device.

1   74. The system of claim 68 wherein the digital rights database comprises:

2   a local digital rights database file stored at a computer device comprising individual digital

3   rights information related to an individual digital content package; and

4   a global digital rights database located at the global rights unit comprising digital rights

5   information related to a plurality of digital content packages.

1   75. The system of claim 74 wherein the local digital rights database and the global digital

2   rights database are operable to be harmonized with each other using a communication pathway.

1   76. The system of claim 74 wherein the local digital rights database is operable to modify

2   data in the global digital rights database using a communication pathway connecting the local

3   digital rights database with the global digital rights database.

1   77. The system of claim 74 wherein the global digital rights database is operable to

2   modify data in the local digital rights database using a communication pathway connecting the

3   local digital rights database with the global digital rights database.

1   78. The system of claim 67 wherein the digital rights to manipulate the digital content data

2   are automatically modified each time the digital content data is manipulated.

1   79. The system of claim 67 wherein the digital rights to manipulate the digital content data

2   are automatically modified according to time-based criteria.

1   80. The system of claim 68 further comprising a tracking manager module operable to

2   gather tracking information concerning the digital content data from the digital rights database.

1   81. The system of claim 80 wherein the tracking manager module is further operable to

2   manipulate the tracking information concerning the digital content data.

1   82. The system of claim 80 wherein each of a plurality of copies of the digital content data

2   comprises a unique identifier operable to distinguish the plurality of copies of the digital content

3   data from each other, and wherein the tracking information concerning the digital content data

4   includes routing information of individual copies of the digital content data, identities of computer

5   devices at which the individual copies of the digital content data reside, and the number of copies

6   of the digital content data in existence.

1   83.   A method of providing secure collaboration among several collaborators, the

2   method comprising:

3   providing a digital asset to a collaborator in an encrypted format;

4   permitting the collaborator to edit the digital asset using an authorized viewer program;

5   and

6   saving changes made by the collaborator in an encrypted format by creating a collaboration

7   file by encrypting a change document representing the changes made by the collaborator and the

8   original encrypted digital asset.

1   84. The method of claim 83 further comprising:

2   providing the collaboration file to another collaborator;

3   permitting the other collaborator to edit the digital asset using an authorized viewer

4   program and the collaboration file; and

5   saving changes made by the other collaborator in an encrypted format by creating a second

6   collaboration file by encrypting a second change document representing the changes made by the

7   other collaborator and the collaboration file such that a second encryption layer is added by the

8   other collaborator.

1   85. The method of claim 84 further comprising presenting to the other collaborator the

2   digital asset and the changes made by the first collaborator in a way that distinguishes the original

3   digital asset from the changes made by the first collaborator.

1   86. The method of claim 85 wherein the digital asset is presented using a font different

2   from a font used to present the changes made by the first collaborator.

1   87. The method of claim 85 wherein the digital asset is presented using a color different

2   from a color used to present the changes made by the first collaborator.

1   88. The method of claim 84 further comprising giving different collaborators different

2   rights with respect to editing the digital asset.

1   89. The method of claim 84 further comprising giving different collaborators different

2   rights with respect to viewing changes made by other collaborators.

1   90. The method of claim 83 further comprising feeding the changes of the change

2   document to an entity that provided the digital asset to the collaborator.